Do as I say or do as I do? How social relationships shape the impact of descriptive and injunctive norms of voting.

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Edward Fieldhouse and David Cutts

Abstract

Social norms play an important role in our understanding of why people vote, yet there is very little known about the relative importance of descriptive and injunctive norms for voter turnout or how normative influence is affected by the political and social relationship between citizens. Using political discussion network data from the British Election Study we examine the joint effect of descriptive and injunctive norms on turnout. We demonstrate that citizens follow the example of those closest to them (descriptive norms), especially their partner, but they also respond to social approval of voting from political discussants regardless of the nature of their relationship

Introduction

There is widespread agreement that social norms play an important role in explaining why people vote (Blais, 2000). Without reference to norms political scientists have struggled to explain why people should vote at all (Riker and Ordeshook, 1968). Despite this, the literature on voter turnout has yet to establish properly the relative extent to which descriptive and injunctive norms matter, both separately and in combination; and whether this is conditional on the nature of the relationship between political discussants. Most existing research on norms of voting has focussed on the role of civic duty, which can be thought of as a personal normative belief rather than a social norm (Bicchieri, 2017). The weight placed on civic duty in the political science literature, compared to relational measures of norms, largely reflects a greater availability of individual level survey data compared to social network data. When comparisons of descriptive and injunctive norms of voting have been made, the role of descriptive norms has generally been given precedent (e.g. Glynn, Huge and Lunney, 2009).

In this article, we use political discussion network data to examine the role of injunctive and descriptive norms on voter turnout. We make three important contributions to the study of voter turnout. First, using theoretical insights from social psychology (Bicchieri, 2005, 2017), by explicitly separating the role of empirical and normative expectations and personal normative beliefs we make a theoretical distinction which should be incorporated into future research on turnout. Second we introduce new and unique empirical evidence regarding the relative importance of these concepts. Contrary to prevalent evidence and assumptions we show that, even when you allow for the role of civic duty and descriptive norms, injunctive norms, which have frequently been dismissed as secondary to descriptive norms, play an important role in voter turnout. Third, by examining the joint effect of injunctive and descriptive norms on turnout, we show, for the first time, that citizens not only follow the example of those closest to them, but they also respond to social approval of voting from political discussants regardless

of the nature of their relationship. More generally, we suggest that the theoretical and empirical lessons of this research can be extended beyond the sub-field of voter turnout to political behaviour more generally.

Norms and turnout

One of the greatest puzzles of political behaviour has been why should citizens vote when, in most elections, they will have almost no chance of determining the outcome (Riker and Ordeshook, 1968). Perhaps the most influential and persuasive solution to this paradox has been the introduction of a consumption element to voting which is not dependent on the outcome, the most frequently cited of which is the notion of duty (Fiorina, 1976). However, although research consistently shows civic duty to be correlated with voter turnout (Blais, 2000) this may be little more than tautology. The inclusion of civic duty simply shifts the puzzle from why people vote to why people believe it is the duty to vote (Barry, 1970). The answer to this latter puzzle lies in social norms (Coleman, 1990).

Much of the literature on social norms of voting has focussed on what social psychologists refer to as personal normative beliefs (Bicchieri, 2017), especially civic duty. For example, according to Blais (2000), what matters is not so much the threat of disapproval but rather the personal belief that voting is a moral obligation. Such normative beliefs may reflect internalised norms, in this case the belief that voting is a citizen's civic duty. More generally, they represent how a person believes they *ought* to behave, which may reflect moral or prudential motivations as well as social ones. In other words, normative beliefs are not conditional on what others do.

In order to understand the importance of norms in voter turnout it is necessary to differentiate between these normative beliefs, and social norms. A definition of social norms that makes this distinction is provided by Bicchieri (2005, p. 11)

> *A social norm is a rule of behaviour that individuals prefer to conform to conform to it on condition that they believe that (a) most people in their reference network conform to it (empirical expectation), and (b) that most people in their reference network believe they ought to conform to it (normative expectation).*

A descriptive norm exists when there is a preference to conform to how others behave (there is an empirical expectation). In the case of voting, this would mean that a citizen believes that other people in her reference group vote. Descriptive norms provide a cognitive shortcut when one is choosing how to behave in a given situation (Cialdini, Kallgren and Reno, 1991) and may involve both coordination (e.g. for example driving on the correct side of the road) and imitation (e.g. copying successful behaviours) (Bicchieri, 2017). A descriptive norm means that behaviour is conditional only on empirical expectations. That is, a person prefers to vote if people in their relevant reference network vote. In contrast, an injunctive norm exists if a behaviour is conditional on normative expectations. In other words, it relies on a perception of how others believe one *should* behave and involves social approval or disapproval. In the case of an injunctive norm of voting this means that other people in social network think that one ought to vote and this is be reflected in social approval of voting or disproval of abstention.[1] It is quite possible for a descriptive norm to exist without an injunctive norm, although they are likely to exist simultaneously.[2]

The important distinction between normative beliefs and social norms – both descriptive and normative – is that social norms are conditional on the behaviour of others (Rolfe, 2012;

[1] In some contexts the reverse, an injunctive norm of not voting, could exist whereby discussants disapprove of voting and approve of abstention (Partheymüller and Schmitt-Beck, 2012)

[2] For example, George is aware that most of his friends vote and as a result he believes that this is a good (or normal) thing to do. George also likes to fit in with his friends and be like them by voting for the Labour Party. There is a descriptive norm is that that most of his friends vote, so he will too. If he thinks they will not bother he would most likely make the same decision (i.e. George's turnout is conditional on empirical expectations). However, most of his friends have never expressed any opinion that George ought to vote. We would therefore say that there is a descriptive norm of voting but not an injunctive one. Now imagine that some of George's friends frequently tell him that he would be not doing his duty if he did not vote: he would be letting down the Labour Party and they would be disappointed with him. He feels pressured by this. We might now say that there is also an injunctive norm of voting.

Bicchieri, 2017). In contrast, a personal normative belief, such as civic duty, is not conditional on social expectations: those who strongly believe that voting is a duty would prefer to vote regardless of their expectations of others (Bicchieri, 2017). To understand and assess the impact of norms on voting behaviour we need to measure three different concepts.

(i) Personal normative belief: I think one should vote.

(ii) Empirical expectation: most people in my reference network vote.

(iii) Normative expectation: I believe most people in my reference network think one should vote.

While there is a widespread assumption in the turnout literature that descriptive norms matter more than injunctive norms (Rolfe, 2012), this is largely inferred from research into other behaviours, mainly from outside of political science (Cialdini, Kallgren and Reno, 1991). Very little research on turnout has actually made this distinction. Moreover, although there is considerable evidence of the impact of social pressure (Green and Gerber, 2010), evidence of the impact of descriptive norms of voting is rather limited. In field experiments which manipulate the descriptive norm of voting, the message that most people vote tends to increase the willingness of people to vote themselves (Gerber and Rogers, 2009). In the small number of cases in which researchers have examined the combined effect of injunctive and descriptive norms of voting the result are mixed. Some studies have found that descriptive norms of voting are more important than injunctive norms (Blais, 2000; Glynn, Huge and Lunney, 2009). One recent study found that "most people are not subjected to strong injunctive pressure" and that "descriptive norms seem to be even more important than injunctive norms" (Blais, Galais and Coulombe, 2018, pp. 10–11). In contrast, Panagopoulos (2014) found evidence for injunctive norms but not of descriptive norms, and no evidence of an interaction between the two. Others have found a moderating effect at the dyadic level: that the influence of injunctive norms is conditional on the presence of consistent descriptive norms (Bicchieri and Xiao, 2009). In other

words, the influence of social pressure to vote from a discussant will be more influential if that discussant votes themselves.

The intimacy of the relationship between discussants is also likely to be relevant to the influence of social norms of voting because closer discussant especially family members are more likely to observe whether or not the subject votes and therefore to apply sanctions (show disapproval) in the event of non-voting (Coleman, 1990; Abrams et al, 2011). It is therefore important to allow for variation in the impact of social norms across different types of social relationship. We therefore propose the following hypotheses.

1. Respondents with (more) discussants who vote (empirical expectations) will be more likely to vote themselves.
2. Respondents with (more) discussants who care whether the respondent votes (normative expectations) will be more likely to vote themselves.
3. The impact of normative and empirical expectations varies by social relationship.
4. The impact of normative expectations is moderated by empirical expectations.

Data and methods

We draw on data from wave 2 of the British Election Study internet panel (Fieldhouse et al, 2015), carried out in May-June 2014, which included a specially designed module on political discussion designed to test social influences on turnout. The data set contains 30,895 individual respondents including 25,387 who named at least one political discussant, which formed the basis of a one-with-many dyadic design (Kenny et al, 2006). In total there were 56,282 dyads. Discussants were identified by a name generator approach, with respondents directed to think of three people that they talk to about politics (following a question about frequency of political

discussion).[3] Our key concepts are measured at two levels of analysis: the network (one for each respondent) and the dyad (one for each discussant). To measure normative expectations or injunctive norms at the dyadic level respondents were asked the question "*Do you think this person cares whether or not you voted in the European Elections*?" of each discussant. At the network level, responses to this question were aggregated across all respondents in the network. Empirical expectations or descriptive norms were measured at the dyadic level using the question: *"As far as you know, did each of these people vote in the recent European Elections?"* At the network level, responses were again aggregated across all discussants. Personal normative beliefs were measured using a standard indicator of civic duty, which captures agreement with the statement *"It is every citizen's duty to vote in an election".*

We cannot assume that empirical and normative expectations are independent of each other. Each of our survey instruments are as perceived by the respondent and it seems plausible that respondents might base their assessments of social approval on knowledge of the behaviour of their discussants (which is more easily observable). Our data confirms that respondents are much more likely to perceive injunctive norms if they believe that their discussant voted themselves. Respondents largely believe that their discussants would expect them to 'practice what they preach': when considering discussants who they believe voted, respondents thought that 69% of those discussants cared whether the respondent voted. This compares to only 20% of discussants who did not vote. When assessing the impact of normative expectations it is therefore important to control for empirical expectations and their interactive effect, since perceived approval is dependent on whether the discussant is a voter.

[3] The wording of the question is as follows: 'Can you think of anyone you sometimes talk to about politics? These people might or might not be relatives. *Provide up to three names starting from the top box. For example, if you only to talk to one person please fill in the top box, if you talk to two people please fill in the top two boxes, if you do not talk to anybody please skip the question.* (If you prefer, you can provide a nickname or initials).'

To test the extent to which the impact of injunctive and descriptive norms depends on the relationship between discussants, respondents were asked about their relationship with each discussant. The most commonly identified discussants were spouses, followed by other family and then friends with neighbours and co-workers making up the smallest group. While we are mainly interested in the differential impact of social norms rooted in different social relationships it is important to note that the exposure to those norms may also by the nature of the relationship. Our data confirms a correlation between relationship type and injunctive norms, with spouses bring the most likely to be thought to approve of voting (62%), followed by other family members (50%) and friends (44%). Neighbours and co-workers were least likely to be perceived to care (29%).

Modelling strategy

There are two key steps in the modelling strategy. First, we model whether or not the respondents voted according to characteristics of their network as well as their own characteristics (H1 and H2). In the second stage, we focus on the dyadic relationship between discussants and respondents. Although this requires removing the dyads from the context of the network, by focussing on interpersonal influence, we are able to explore how the impact of normative expectations varies according to the relationship between the respondent and the discussant (hypotheses 3 and 4).

Hypotheses 1-2 are tested using standard logistic regression models at the respondent or network level. The key explanatory variables are respondent level empirical and normative expectations as described above. Because different respondents named different numbers of discussants, we stratify the models by the number of discussants in the network so that we do not conflate the number of discussants who vote or care about voting with the size of the network. We focus mainly on the three-discussant networks as they contain the most

information, but it is important to compare with smaller networks in case three person networks are unusual in anyway. Overall 70% of networks contain three discussants, 18% two, and 12% only one discussant. These models include a number of controls at the respondent level consistent with individual level predictors of voter turnout (Smets and Van Ham, 2013). This is important because numerous respondent characteristics may also influence the selection of discussants and the perception of their social norms. Crucially we include civic duty, which allows us to control for the possibility that perceiving a social norm in others may be related to personal normative beliefs. This variable is measured at the previous wave of the panel (wave 1) to minimise the possibility that our measure of normative beliefs is a reflection of perceived injunctive norms. Additionally, we control for whether any of the discussants asked the respondent to vote.[4] This enables us to separate the impact of inter-personal mobilization (Rosenstone and Hansen, 1993) or a companion effect (Fieldhouse and Cutts, 2012) from the co-ordination, informational or normative effects of empirical expectations. We also control for strength of party identification (also lagged), political attention (lagged), political efficacy (lagged), party mobilization (measured as campaign contact), age, gender, education, marital status, and the number of days on which the respondent typically discusses politics. The latter is important because frequency of political discussion is closely related to the selection of discussants (e.g. how likely they are to care) and the number of discussants the respondent selects.[5]

In the second stage, we again use a logistic regression model but this time stratified by relationship type such that each case represents a single dyad. This allows us to look at the

[4] "Thinking back to the day of the elections on May 22nd, did any of these people ask you to go to vote together?" *Please tick all that apply.*

[5] In our data the average number of days discussing politics was 2.3 for respondents naming one discussant, 3.2 for two discussants and 4.4 for three discussants. Our data also shows that perceived discussant approval increases with the frequency of discussion, with those discussing politics on a daily basis being more than three times as likely to perceive approval as those discussing politics less than once per week.

extent to which the impact of empirical and normative expectations vary by the nature of the relationship between respondent and discussant, and whether or not the impact of normative expectations are conditional on empirical expectations. Empirical and normative expectations are measured at the dyadic level as described above. In other words, do citizens consider whether their discussants expect them to 'do as they say' even if they do not do so themselves? To avoid using the same respondent more than once in each model we select the first instance of each relationship type named by each respondent. For example, in the friends model we take the first named friend of each respondent. The outcome variable is again turnout, and the key explanatory variables are dyadic normative and empirical expectations.

In these models we include a product interaction between normative and empirical expectations to allow us test for the presence of an interactive as well as additive effect. It is well know that assessing interactions in logistic models is complicated by the effect of compression resulting from the bounded nature of the outcome (Ai and Norton, 2003). In keeping with our theoretical expectations we include the product interaction terms in all the models regardless of conventional statistical significance because not only are such significance tests unreliable, but because inclusion of the product interaction improves model estimation even in the absence of interaction in the data generating process (Berry, DeMeritt and Esarey, 2010, 2016; Rainey, 2016). We carry out and report various methods for estimating and visualising the direction and importance of the interactions.

We control for the same individual level variables as in the network turnout model and the dyadic variable capturing whether or not the discussant invited the respondent to go to vote together. This variable helps us differentiate between the effect of normative pressure and inter-personal mobilization. However, arguably, this might partly reflect a norm of voting: if you ask someone to vote, you are signalling not only that you will vote yourself but also that you believe the person you ask should also vote. Consequently, including this provides a tough test

for the impact of social norms, although the possibility of endogeneity remains. This is discussed further below.

Results

Table 1 shows the results of the network model of turnout and provides support for hypotheses 1 and 2. Controlling for a wide range of network and individual characteristics, including civic duty, both empirical expectations and normative expectations have an independent effect on the probability of voting in the European Parliament elections. This is true across all sizes for network with the size of the effect being smaller in larger networks. This is most likely because where respondents have only one or two discussants; these are likely to be relatively more influential and to be more likely to be spouses or other close family. Moreover, for all network sizes, empirical expectations appear to be more important than normative expectations. To illustrate this more clearly we can visualise the predicted probability of voting from the three-discussant model by both the number of discussants who voted and the number who approve (Figure 1). We see that for any given number of discussants that voted – that is holding empirical expectations constant – there is an increase in turnout according to the level of normative expectations (how may discussants care about voting).

Figure 1. Probability of voting by number of discussants who vote and who care whether respondent votes in three person networks (when number of discussants=3).

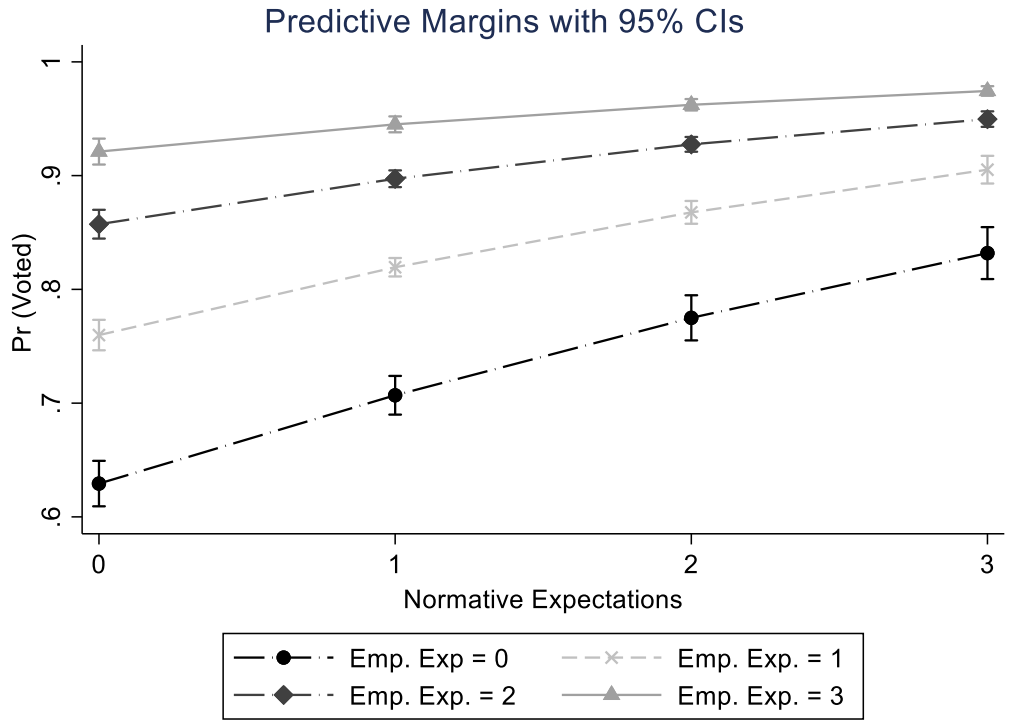


Table 1. Logistic Model of European Parliament Election Turnout by Empirical and Normative Expectations

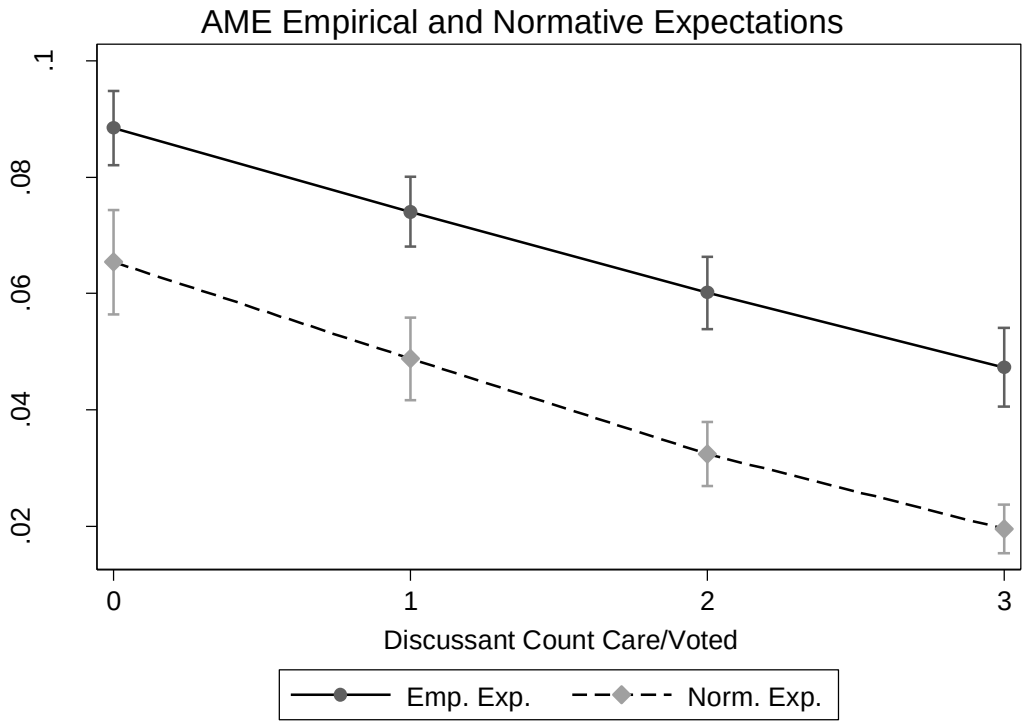
Variables	**One Discussant**		**Two Discussants**		**Three Discussants**	
	β	**SE**	**β**	**SE**	**β**	**SE**
Constant	-3.76*	0.29	-3.43*	0.37	-3.01*	0.25
Network Variables						
Empirical Expectations	1.80*	0.09	1.15*	0.07	0.74*	0.03
Normative Expectations	0.86*	0.09	0.47*	0.06	0.42*	0.03
Discussant Asked You To Vote	0.56*	0.12	1.03*	0.14	1.04*	0.10
Respondent Variables						
Overall Party Contact	0.40*	0.09	0.73*	0.10	0.53*	0.07
Discuss Politics	0.06*	0.02	0.01	0.03	0.04*	0.02
Political Attention (lagged)	0.06*	0.02	0.07*	0.03	0.09*	0.02
Efficacy don't understand (lagged)	-0.09*	0.04	-0.10*	0.05	-0.12*	0.03
Party ID & Strength (Combined) (lagged)	0.23*	0.05	0.17*	0.06	0.15*	0.04
Civic Duty (Personal Norms) (lagged)	0.47*	0.04	0.42*	0.05	0.39*	0.03
Female	-0.43*	0.08	-0.42*	0.09	-0.48*	0.07
Age Categories: Under 26						

Age 26-35	0.62* 0.19	0.25 0.23	0.22 0.14
Age 36-45	0.89* 0.19	0.61* 0.22	0.60* 0.14
Age 46-55	1.04* 0.19	0.89* 0.22	0.78* 0.13
Age 56-65	1.28* 0.18	0.90* 0.21	0.92* 0.13
Age 66 plus	1.60* 0.19	1.01* 0.22	1.15* 0.13
Education: All Others			
Degree or More	0.10 0.08	0.27* 0.09	0.20* 0.07
Model Fit			
Chi-Square <0.05	2177.06*	1445.61*	2849.34*
Log Likelihood	-2318.20	-1698.86	-3361.76
McFadden R^2	0.32	0.30	0.30
AIC	4670.40	3431.73	6757.53
N	5616	4336	11070

*Significant <0.05; Data is unweighted.

Figure 2 suggests that the impact of both empirical and normative expectations vary according to the level of the other, in keeping with compression interaction common in logistic regression models (Nagler, 1991). In order to assess the relative importance of each we plot the average marginal effect of both variables across the full range (0-3) of the other variable and superimpose these on the same chart (Figure 2). Thus in the normative expectations plot the x-axis represents the count of discussants who voted and in the empirical expectations plot, the x-axis represents count of discussants who care whether the respondent votes. We see that at all values of these variables, the average marginal effect of empirical expectations is larger than that of normative expectations. However, as Table 1 indicates both variables have substantial effects on the probability of voting even after controlling for personal normative beliefs and a host of other correlates of individual turnout. For example, when the respondent has one discussant that cares whether s/he votes, each discussant who votes themselves increases turnout by approximately 7%. Similarly, for a respondent who has one discussant who voted, each discussant who cares whether s/he votes increases turnout by around 6%. The overall average marginal effect of empirical expectations for respondents who have three discussants is 7% and for normative expectations is 4%.

Figure 2. Comparison of Average marginal effect of Normative Expectations by Empirical Expectations; and Empirical Expectations by Normative Expectations (respondents with 3 discussants only).



As explained above, to test hypothesis 3 (that relationship type moderates the impact of normative and empirical expectations) and hypothesis 4 (that there is an interaction between empirical and normative expectations) we stratified our analyses so that we have a separate model for each type of relationship (see Table 2). We see that the effect of the control variables is fairly consistent across models. It is important to note the impact of the 'asked to vote' variable. Inter-personal influence might take the form of direct mobilization or companion effects (Fieldhouse and Cutts, 2012) and not require any normative component. Simply being 'invited' to vote by a family member appears to be an important predictor of turnout, but the same is not true for non-family members. Voting together is very much a household phenomenon (Bhatti, Fieldhouse and Hansen, 2018) and it is therefore not surprising that the

invitation to vote together is powerful only among family members. Nevertheless, even allowing for this, both injunctive and descriptive norms are important. Moreover, although it might be reasonable to assume that the effect of descriptive and injunctive norms might be mediated by mobilization, especially by a spouse, it is worth noting that when we ran the same model without the inclusion of the 'asked to vote' variable, the parameter estimated for empirical and normative expectations are barely changed.[6] The only instance where controlling for personal mobilization makes a non-negligible difference is in the case of spousal empirical expectations. That is, when we control for being asked to vote by a spouse, the effect of empirical expectations is slightly smaller. Given that spouses frequently vote together, it is perhaps surprising that adding this control does not make even more difference. In short, we do not find very much evidence that the injunctive or descriptive norms are being mediated by (or attributable to) interpersonal mobilization.

Turning to those parameter estimates for the norms variables, what is clear is that empirical expectations - or descriptive norms – are especially important for spouses and rather less important for other relationship types. By contrast, the effect of normative expectations is more consistent across relationship types, albeit slightly weaker for neighbours and co-workers. Normative expectations are actually stronger for family members other than spouse – most likely children or parents. Overall, the magnitude of the effect of normative expectations is on a par with empirical expectations except in the case of spouses.

Table 2. Logistic Model of Dyad Relationship Turnout by Normative and Empirical Expectations

[6] The estimates for empirical expectations in the same model without 'Asked to vote' were as follows (values from model in table 2 in parentheses: Spouse 2.74 (2.58); other family 0.96 (0.93); friends 0.82 (0.82); and Other 0.92 (0.93). For normative expectations the estimates were: Spouse 0.69 (0.67); other family 1.08 (1.07); friends 0.64 (0.64); and other 0.55 (0.55)

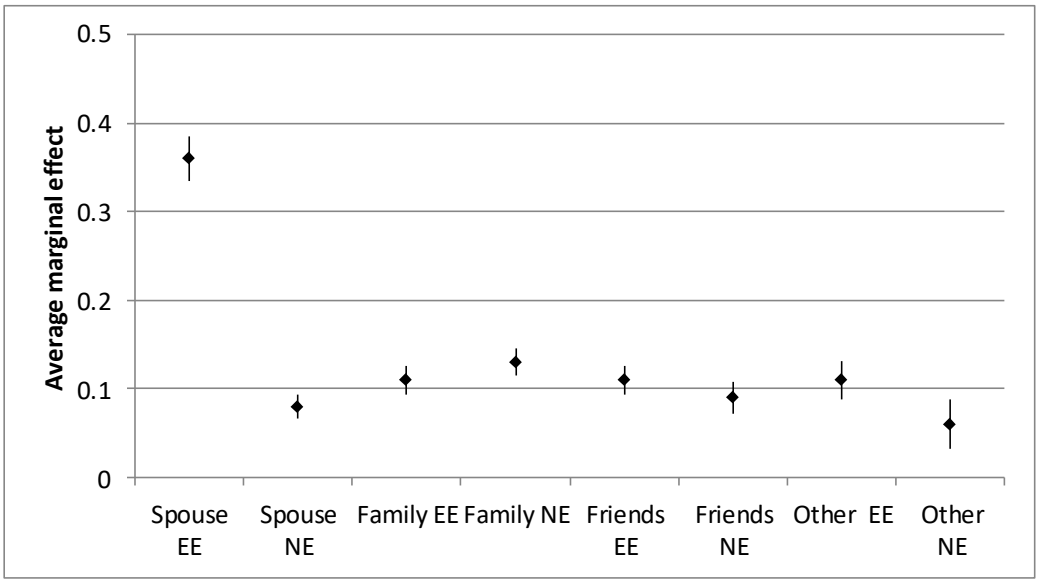
*Significant <0.05; Data is unweighted.

Variables	Spouse		Family		Friends		Neigh/Other	
	β	SE	β	SE	β	SE	β	SE
Constant	-2.40*	0.26	-2.01*	0.21	-2.26*	0.21	-1.64*	0.26
Network Variables								
Empirical Expectations	2.58*	0.09	0.93*	0.08	0.82*	0.08	0.93*	0.10
Normative Expectations	0.67*	0.09	1.07*	0.10	0.64*	0.10	0.55*	0.15
Empirical Exp*Normative Exp	0.40*	0.14	-0.07	0.14	0.23	0.14	-0.25	0.20
Discussant Asked You To Vote	0.62*	0.10	0.57*	0.16	0.01	0.22	-0.39	0.23
Respondent Variables								
Overall Party Contact	0.60*	0.07	0.66*	0.06	0.62*	0.06	0.49*	0.08
Discuss Politics	0.11*	0.02	0.13*	0.02	0.13*	0.02	0.13*	0.02
Political Attention (lagged)	0.08*	0.02	0.07*	0.02	0.12*	0.02	0.06*	0.02
Efficacy don't understand (lagged)	-0.10*	0.03	-0.11*	0.03	-0.08*	0.03	-0.17*	0.04
Party ID & Strength (Combined) (lagged)	0.19*	0.04	0.21*	0.04	0.18*	0.04	0.32*	0.04
Civic Duty (Personal Norms) (lagged)	0.74*	0.08	0.90*	0.07	0.94*	0.07	0.97*	0.08
Female	-0.43*	0.06	-0.24*	0.06	-0.22*	0.06	-0.26*	0.07
Age Categories: Under 26								
Age 26-35	0.21	0.19	0.19	0.13	0.15	0.13	0.33	0.18
Age 36-45	0.31	0.19	0.41*	0.12	0.67*	0.13	0.56*	0.18
Age 46-55	0.38*	0.19	0.77*	0.12	0.83*	0.13	0.88*	0.17
Age 56-65	0.36*	0.18	0.91*	0.11	0.93*	0.12	1.01*	0.17
Age 66 plus	0.43*	0.19	1.18*	0.12	1.19*	0.12	1.45*	0.19
Education: All Others								
Degree or More	0.23*	0.07	0.26*	0.06	0.17*	0.06	0.14	0.08
Model Fit								
Chi-Square <0.05	3098.32*		1607.26*		1331.29*		944.82*	
Log Likelihood	-3531.44		-3840.70		-3745.24		-2517.52	
McFadden R^2	0.44		0.22		0.20		0.20	
AIC	7098.89		7717.41		7526.48		5071.05	
N	12600		9805		9713		5929	

The overall relative importance of empirical and normative expectations is illustrated in Figure 3, which shows the average marginal effects of each variable by relationship type. The plot highlights the special importance of empirical expectations for spouses, whilst confirming the importance of both empirical and normative expectation for all types of political discussant. The respondent who has a spouse who voted is, on average, approximately 36 percentage points more likely to vote than one who has a spouse who does not. This is consistent with research showing a high level of correspondence in turnout in household especially among spouses (Cutts and Fieldhouse, 2009) and, although we control for direct inter-personal mobilization (asked to vote), there may be a variety of reasons for this correspondence that are not normative.

On average, having a spouse who cares whether you vote raises turnout by about eight percentage points. For other relationship types, empirical and normative expectations have a much more similar impact. Indeed, outside of spousal relationships, social approval of voting is equally as important as descriptive norms.

Figure 3. Average marginal effects of dyadic normative and empirical expectations by relationship type.

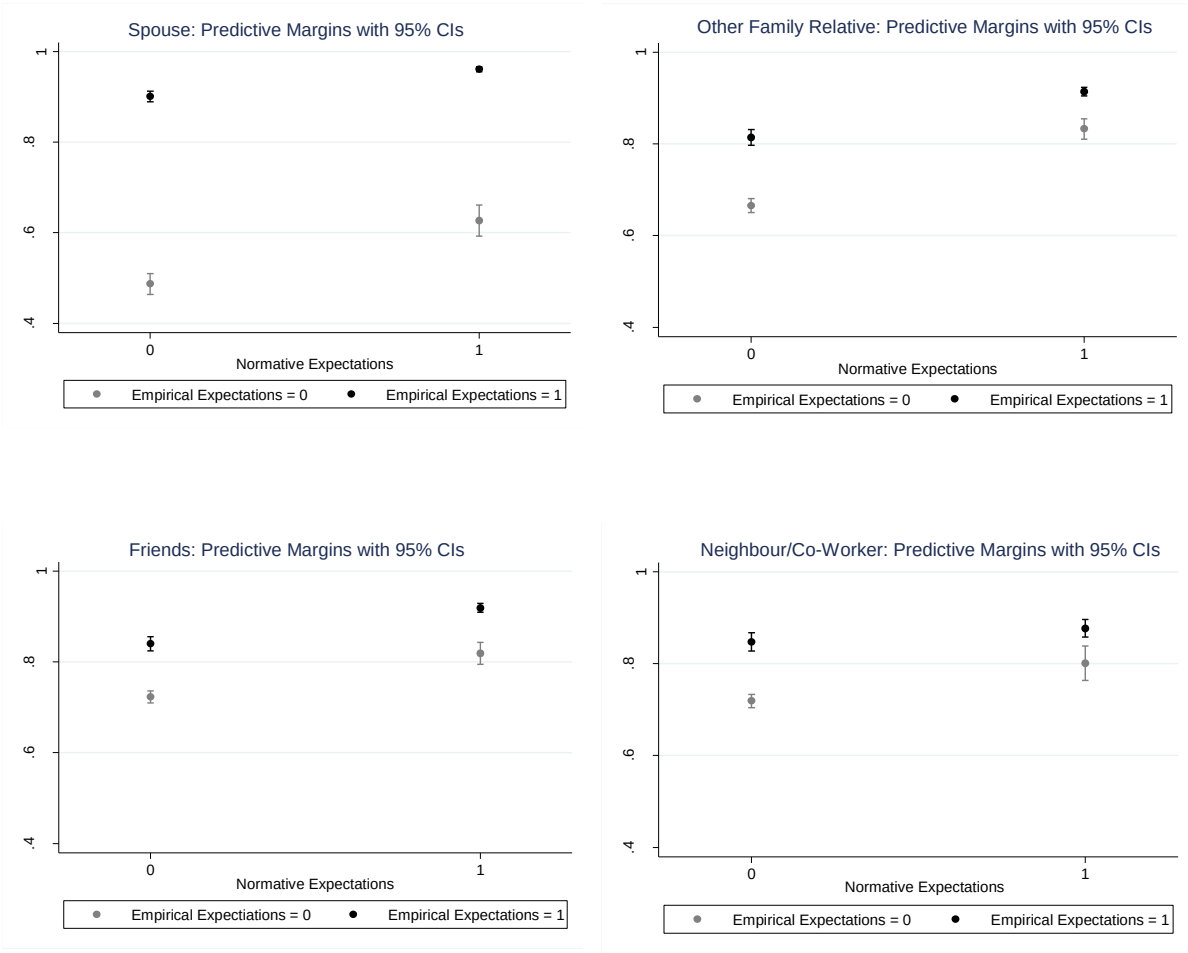


Assessing interactive effects

It is widely recognised that the statistical significance and point estimates of interactions are problematic to interpret (Ai and Norton, 2003; Berry, DeMeritt and Esarey, 2010). In order to understand the interactive effects of two independent variables in a binary logit model it is important to examine the marginal effects of each variable as the other varies. To assess the joint effect of empirical and normative expectations on turnout (hypothesis 4) we therefore plot the predicted probabilities of voting by empirical and normative expectations for each relationship type (Figure 4). It is clear from the plot that there are notable slopes and gaps

across all relationship types demonstrating the impact of normative and empirical expectations respectively. However, the evidence for an interactive relationship is mixed.

Figure 4. **Predictive margins Normative and empirical expectations (dyadic models)**



The predictive margin for spouses shown in Figure 4 appears to suggest an interactive relationship between normative and empirical expectations but not in in a way consistent with the positive interaction as shown in Table 2. Rather, the impact of normative expectations

seems to be smaller in the presence of empirical expectations: the difference between having a spouse who cares about voting is roughly six percentage points if they vote themselves compared with fifteen if they did not. In other words, contrary to hypothesis 4, if a spouse votes themselves, whether or not they care about whether their partner votes seems to matter less.

This also appears to be to be true (to a lesser extent) for other family but not friends and neighbours/co-workers. However, taken together, the plots and the interaction effects suggest that the primary driver in this interaction is compression. If a spouse votes (empirical expectations =1) the chance of the respondent voting is already very high. If the probability of voting P(Y) is a function of an unbounded latent utility for voting (Y*) then we would expect that when a spouse votes the average latent utility for voting is much higher. Assuming (as is the case in our data) the mean probability of voting is greater than 0.5 then, depending on the distribution of Y*, it will be less likely that an increase in Y* due to social pressure will lead to the utility threshold required for voting to be exceeded (Nagler, 1991; Berry, DeMeritt and Esarey, 2010). In other words, there is less chance social pressure will matter if your partner votes because it is more than likely you would have voted anyway.

As noted above, in a model containing a product interaction we need to consider both that product interaction (which in this case is positive) as well as the effect of compression (Berry, DeMeritt and Esarey, 2016; Rainey, 2016). Examination of the evidence shown in Appendix 1 including the second difference in marginal effects and the change in model fit suggest that there is an interactive relationship in the case of spouses and other family, but not so for other relationship types (see Appendix Table 1).

In sum, the preferred models (with a product interaction) suggest that injunctive norms matter less if a spouse or family member votes themselves (compared to when the discussant does not

vote) insofar as social pressure is less likely to be decisive in the voting decision. Indeed spousal voting is very often a sufficient condition for voting (Fieldhouse and Cutts, 2012).

Discussion

In this article, for first time, we have employed network data drawn from a sample of the general population to examine the relative importance of injunctive and descriptive norms for voter turnout; the extent to which their effects are interactive or additive; and how their influence varies across different social relationships. We show that descriptive and injunctive norms of voting are closely related but allowing for this we find that both play an important role in voter turnout. Whilst on the face of it our results are consistent with the orthodox view that that descriptive norms are more important than injunctive norms, there are two reasons why this is not the conclusion that we draw.

First, whilst our research used the best available network data and our models controlled for a large array of potential confounding variables including civic duty, inter-personal mobilization, political interest and party identification; the processes of normative influence are, by definition, subject to endogeneity (people influence each other). For example, respondents may take their own voting behaviour as evidence of what others most likely do, or may be more likely to select discussion partners with similar political tastes (Bello and Rolfe, 2014). Moreover, just as discussants influence respondents, respondents also influence discussants. This is problematic for the dyadic measure of descriptive norms since, what that measures is simply whether the respondent believes the discussant voted. Therefore, when analysing the effect of this on the respondent's turnout, what we capture is the correspondence in turnout. Previous research has shown such levels of correspondence to be high (Cutts and Fieldhouse, 2009) and to have a large causal component (Bhatti, Fieldhouse and Hansen, 2018), yet that

correspondence may be the result of influence in either direction. Whilst we explicitly controlled for inter-personal mobilization and companion effects, the effects of co-ordination and imitation may run from respondent to discussant or from discussant to respondent. It is therefore prudent to assume that the actual effect of descriptive norms is only half that of the estimated effect size for our empirical expectations variable. In contrast, whilst there are other potential sources of endogeneity - for example, if respondents infer that discussants approve of their voting because they themselves care about voting – there is no equivalent double counting of the effect of normative expectations: the survey question explicitly refers to social approval of the discussant and not the reverse.

Second, our findings clearly demonstrate that the relative importance of descriptive norms is limited to spouses. Given that couple are most likely to observe each other's voting behaviour and frequently make joint decisions to vote (Glaser, 1959; Cutts and Fieldhouse, 2009; Fieldhouse and Cutts, 2012) this is not altogether surprising. Across all other relationship types, injunctive norms have an impact on voter turnout that is equally as large as descriptive norms, and considerably larger if we assume, as argued above, that the effects of the descriptive norms are only half their estimated size. Whilst we cannot eradicate all possible sources of endogeneity in the effect of both descriptive and injunctive norms on turnout, having set a tough test of their impact through our choice of control variables, we can be reasonably confident in making such a relative assessment.

Our findings regarding the interactive effect of injunctive and descriptive norms were nuanced. There is some evidence that empirical and normative expectations combined in a complex way, with the effect of social pressure being smaller when a discussant voted. However, we noted that this largely due the fact that, for spouses in particular, there was not much room for those with partners who voted to be influenced by social pressure as their likelihood of voting was

already very high. If anything, this ‘compression’ was offset somewhat by an increased sensitivity to social pressure from spouses who voted.

These findings have important implications for the study of voter turnout and political behaviour more generally. We should not assume that it is possible to measure the effects of normative influences on voter turnout simply by relying on the notion of civic duty. Clearly internalised normative beliefs are important, but voter turnout is conditional on the norms, beliefs and actions of social referents, especially those who are socially most intimate. Moreover, we should also not assume that such normative influence is purely behavioural or descriptive. Whilst, in the case of married couples, it is clear that whether or not a spouse votes themselves is crucial for voter turnout, for all other types of political discussant injunctive norms are equally important (or perhaps more so). It appears that political discussant partners are inclined to not only ‘do as you do’ but also ‘do as you say’. In the age of social media and the proliferation of political information, political discussion with social intimates is still a crucial ingredient creating the social norms which underpin political participation.

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